

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A lens system for a plurality of charged particle beams, comprising:
at least two lens modules, each comprising a first pole piece, a second pole piece and at least one opening for a charged particle beam; and
at least one excitation coil providing a magnetic flux to the at least two lens modules, wherein each lens module has n -fold symmetry with respect to the center of the opening and $n > 1$.
2. (Previously Presented) The lens system according to claim 1, wherein one charged particle beam travels through each of the openings, thereby being focused in a lens field area.
3. (Previously Presented) The lens system according to claim 1, wherein the center of each opening provides an optical axis and wherein a lens field corresponding to each opening has at least two planes of symmetry with respect to the optical axis.
4. (Previously Presented) The lens system according to claim 1, wherein the openings of all lens modules sharing one excitation coil form a row of openings.
5. (Previously Presented) The lens system according to claim 1, wherein at least four openings are provided within one row, thereby increasing symmetry for each opening with respect to an optical axis of the opening.
6. (Previously Presented) The lens system according to claim 1, wherein the at least one excitation coil has a non-circular shape.
7. (Previously Presented) The lens system according to claim 1, wherein the at least one excitation coil has substantially the shape of a rectangle with rounded edges.
8. (Previously Presented) The lens system according to claim 1, further comprising:

at least two lens rows, each comprising an excitation coil; and

at least two lens modules arranged next to each other to form a two-dimensional arrangement of openings.

9. (Previously Presented) The lens system according to claim 1, wherein the at least two lens modules are arranged to form a two-dimensional arrangement of at least four openings and share one excitation coil.

10. (Previously Presented) The lens system according to claim 1, wherein the openings for the charged particle beams have at least in one direction a distance with respect to each other of about 10 mm to about 90 mm.

11. (Previously Presented) The lens system according to claim 8, wherein each row of lens modules is terminated at its ends by a shielding plate.

12. (Previously Presented) The lens system according to claim 1, wherein each lens module is positioned in relation to an adjacent module by providing a gap of about 0.1 mm to 3 mm.

13. (Previously Presented) The lens system according to claim 12, wherein the gap contains a non-magnetic material.

14. (Previously Presented) The lens system according to claim 1, wherein each lens module comprises magnetic flux shaping openings.

15. (Previously Presented) The lens system according to claim 1, wherein for each lens module, an electrostatic immersion lens is provided.

16. (Previously Presented) The lens system according to claim 15, wherein each electrostatic immersion lens comprises at least two electrodes.

17. (Currently Amended) A method for manufacturing a lens system for a plurality of charged particle beams having at least two lens modules, each comprising a first pole piece, a second pole piece, and at least one opening for a charged particle beam, and at

least one excitation coil providing a magnetic flux to the at least two lens modules, comprising:

manufacturing the at least two lens modules, each comprising:

a first pole piece;

a second pole piece; and

at least one opening for a charged particle beam; and

providing a common excitation coil for the at least two lens modules, wherein the center of each opening provides an optical axis, a lens field corresponding to each opening has n -fold symmetry with respect to the optical axis, and $n > 1$.

18. (Previously Presented) The method according to claim 17, wherein manufacturing each of the lens modules comprises:

providing a cylindrical intermediate product; and

flattening at least two sides of the cylindrical intermediate product.

19-33. (Cancelled)

34. (Currently Amended) A multiple charged particle beam device, comprising:

a charged particle beam source;

a detector for detecting secondary particles;

beam shaping means;

a housing for the charged particle beam column, wherein the housing can be evacuated; and

at least one lens system comprising:

at least two lens modules, each comprising a first pole piece, a second pole piece, and at least one opening for a charged particle beam; and

at least one excitation coil providing a magnetic flux to the at least two lens modules, wherein each lens module has n -fold symmetry with respect to the center of the opening and $n > 1$.

35-36. (Cancelled)